

Regarding independent claim 1, the PTO cited *Tabanou et al.* as disclosing the claimed invention, which is an energy harvesting system that includes a first subsystem for receiving **ambient** RF signals and a second subsystem for converting the RF energy from such **ambient** RF signals into DC electrical power. As understood from the plain meaning of the term “**ambient**,” as supported in the specification of the present invention, the claimed **ambient** RF signals refer to those RF signals that are existing or present all around. Thus, the claimed **ambient** RF signals are to be distinguished from those RF signals that come from a power source and directed to a receiver that is expecting to receive such directed RF signals for power.

It is respectfully submitted that *Tabanou et al.* discloses such directed RF signals and not the **ambient** RF signals as claimed. Specifically, *Tabanou et al.* discloses an approach to collecting sensed drilling information, communicating that subsurface information to above surface facilities via wireless means, and transmitting directed RF signals to subsurface drilling devices. Thus, *Tabanou et al.* actually requires a power source for transmitting RF power to a subsurface remote sensing unit, which collects such specifically transmitted RF power and not the **ambient** RF signals all around it as claimed (see, for example, col. 9, lines 32-48 and col. 31, line 66 to col. 32, line 3). Indeed, *Tabanou et al.* does not disclose the collection of **ambient** RF signals anywhere in its disclosure. In fact, the remote sensing unit is operating in a subsurface environment wherein there is very little or no **ambient** RF signals or power to collect, and the only RF signals such unit is intended to collect is the transmitted RF power. Therefore, it would not even have been obvious to one skilled in the art to use such unit to collect **ambient** RF signals. Further, *Tabanou et al.* uses the term “**ambient**” in accordance to its plain meaning to refer not to the collected RF signals but to the surrounding existing pressure that is collected by the subsurface remote sensing unit. This is evident that *Tabanou et al.* does not intend to collect **ambient** RF signals as claimed in the present invention.

Regarding independent claim 11, the PTO also cited *Tabanou et al.* as disclosing the claimed invention, which is an energy harvesting system that includes a first subsystem for harvesting **ambient** energy and a second subsystem for converting the harvested **ambient** energy into DC electrical power. As explained above, because *Tabanou et al.* does not disclose the

collection and conversion of **ambient** RF signals or energy, *Tabanou et al.* cannot be cited to anticipate the claimed invention.

Regarding independent claim 28, the PTO also cited *Tabanou et al.* as disclosing the claimed invention, which is a method for harvesting electromagnetic energy that includes receiving **ambient** electromagnetic energy and converting the **ambient** electromagnetic energy into DC electrical power. As explained above, because *Tabanou et al.* does not disclose the collection and conversion of **ambient** RF signals or energy, *Tabanou et al.* cannot be cited to anticipate the claimed invention.

Accordingly, it is respectfully submitted that claims 1, 11, 28 and their dependent claims, i.e., claims 1-19 and 28-37, are neither disclosed nor made obvious by the references of record.

Rejection of claims 2-6, 8-10, 12-19, and 30-31 under 35 U.S.C. 103(a) as being unpatentable over Tabanou et al. in view of various other references

Because independent claims 1, 11, and 28 are allowable over *Tabanou et al.* for the reasons set forth above, it follows that dependent claims 2-6, 8-10, 12-19, and 30-31 are also allowable over *Tabanou et al.* for the same reasons.

Rejection of claims 20-27 under 35 U.S.C. 103(a) as being unpatentable over Mickle et al. (U.S.P. No. 6,289,237) in view of Tabanou et al.

Regarding independent claim 20, the PTO cited *Mickle et al.* as disclosing the antenna for receiving **ambient** RF signals and an energy conversion subsystem for converting the RF energy from such **ambient** RF signals into DC electrical power, as claimed. However, like *Tabanou et al.*, *Mickle et al.* requires a power source for transmitting RF signals or power and a remote station that collects such specifically transmitted RF power and not the **ambient** RF signals all around it as claimed (see, for example, the Abstract, first paragraph of the Summary of the Invention, and col. 3, lines 34+ in the Description of the Preferred Embodiments).

Accordingly, claims 20-27 are neither disclosed nor made obvious by *Mickle et al.*, *Tabanou et al.*, or any other reference of record, singly or in any combination.